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EXAMINER

POLLACK, MELVIN H

ART UNIT PAPER NUMBER

2145

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/067,432	Applicant(s) DATTA, ANINDYA	
	Examiner Melvin H. Pollack	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>see attached office action</u> . |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12 June 2006 have been fully considered but they are not persuasive. An analysis of the rejection is provided below.
2. The examiner has received the Red Brick Systems document and the new drawings.
3. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "the back end monitor and/or servlet are separate from the application server and template (P. 13, lines 12-16)") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). There are no claims that specify a physical separation, nor are there limitations to the effect that the back end monitor inserts a key into the template without a request or access from the application server.
4. That said, Craig does in fact teach that the application server (Fig. 3B, #355) receives keys (Fig. 3B, #360, 361) from a separate back-end server (Fig. 3B, #375, 376), as shown in the previous action. See also col. 11, lines 15-45.
5. Applicant also added to the claims new limitation "wherein the template is based upon one or more parameters specific to the user." Applicant fails to specify in remarks the area of the specification from wherein the added limitation is drawn, and examiner assumes for this action that it refers to Pp. 20-23 of the specification, wherein any change and customization of the template is possible.

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6. The examiner notes that the claims as written state that the page is specific to the user, as opposed to *by* the user, indicating that the user does not have to send the parameter, and further that said parameter may be used by other users. The lack of remarks in regard to the added limitation adds to the broadness of the claim.

7. Nevertheless, the examiner will modify the prior rejection in order to add art teaching the new limitations.

8. Therefore, the rejection is final.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-4, 11-16, 22-24, 28-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig et al. (6,757,708) in view of Gauthier et al. (6,993,590).

11. For claim 1, Craig teaches a web page delivery system (abstract) for dynamically generating a web page comprising cacheable content (col. 1, line 1 – col. 5, line 45), said delivery system comprising:

- a. An origin site infrastructure (Fig. 2, #47) comprising
 - i. An application server (Fig. 2, #47) operative to receive a web page request from a user (Fig. 5, #500), to generate a web page template corresponding to a layout of the web page (Fig. 3B, #355), and to forward the template for creation of the web page (Fig. 4, #420), and

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- ii. A back-end monitor operative to insert a key into the template, (col. 9, lines 25-35) the key identifying a cacheable content fragment (col. 8, line 60 – col. 9, line 5); and
 - b. A dynamic proxy cache (Fig. 2, #46) operative to receive the template (col. 8, line 35 – col. 9, line 40) from said application server (col. 11, lines 35-50), to create the web page as instructed in the template by inserting the cacheable content fragment identified by the key (Fig. 3B, #360 and #361), and to deliver the web page to the user (Fig. 3B, #310b);
 - c. Wherein the template is based upon one or more parameters (col. 10, line 40 – col. 12, line 65).
- 12. Craig does not expressly disclose whether or not the parameters are specific to the user. Gauthier teaches a method and system (abstract) of providing a proxy cache system (col. 1, line 1 – col. 3, line 10) in order to retrieve requests and provide cached and updated responses (col. 3, line 10 – col. 4, line 15), wherein user-specific parameters are collected (col. 4, line 15 – col. 5, line 2) and used to customize the template (col. 9, lines 28-60). At the time the invention was made, one of ordinary skill in the art would have utilized the Gauthier method in order to increase revenue by selling advertisements (col. 4, line 60 – col. 5, line 2).
- 13. For claims 2, 33, Craig teaches that said back end monitor is further operative to determine whether the web page comprises the cacheable content fragment Fig. 5, #510), and wherein said back end monitor inserts the key into the template in response to a determination that the web page comprises the cacheable content fragment (Fig. 4, #425).

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14. For claims 3, 16, said back end monitor is further operative to determine whether the cacheable content fragment is stored in said dynamic proxy cache (Fig. 5, #520), and wherein said back end monitor inserts the key into the template in response to a determination that the cacheable content fragment is stored in said dynamic proxy cache (Fig. 4, #435 and #475).

15. For claims 4, 23, Craig teaches that said back end monitor is further operative to determine whether the cacheable content fragment is stored in said dynamic proxy cache (Fig. 5, #520), wherein said back end monitor generates the cacheable content fragment and inserts the cacheable content fragment into the template in response to a determination that the cacheable content fragment is not stored in said dynamic proxy cache (Fig. 9, #900), and wherein said dynamic proxy cache stores the cacheable content fragment after receiving the template from said application server (Fig. 9, #905).

16. Claims 11, 28-32, 34 are drawn to the limitations in claim 1. Craig teaches the added limitations of executing a script in response to the web page request (Fig. 9, #920), the script comprising a code block corresponding to a content fragment of the web page (col. 8, lines 35-45), and determining whether the content fragment is cacheable (Fig. 5, #530; Fig. 9, #910).

Therefore, since claim 1 is rejected, claims 11, 28-32, and 34 are also rejected for the reasons above.

17. For claim 12, Craig teaches that said deciding step comprises determining whether the code block comprises a tag indicating that the content fragment is cacheable (col. 13, lines 20-50).

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18. For claim 13, Craig teaches that the code block comprises a tag indicating cache characteristics of the content fragment, and said determining step comprises reading the tag to determine the cache characteristics of the content fragment (col. 16, lines 40-50).

19. For claim 14, Craig teaches executing the code block to generate the content element in response to a determination that the content fragment is non-cacheable, and inserting the non-cacheable content element into the template (col. 17, lines 5-10).

20. For claim 15, Craig teaches inserting a command into the template in response to a determination that the content fragment is cacheable (col. 16, lines 45-65), the command instructing the dynamic proxy cache to retrieve the cacheable content fragment (col. 16, lines 1-25).

21. For claim 22, Craig teaches storing the cacheable content fragment in architecture of a web site (Fig. 2).

22. For claim 24, Craig teaches inserting a command into the template, the command instructing the dynamic proxy cache to perform said storing step (col. 9, lines 20-40).

23. Claims 5-9, 17, 18, 20, 25-27, 35, 39, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig and Gauthier as applied to claims 1, 11, 23 above, and further in view of Matsumoto et al. (6,757,726).

24. For claims 5, 25, Craig teaches the ability to update cacheable content fragments (Fig. 6; col. 14, lines 40-65) and the potential use of a lookup table (col. 12, lines 44-50), but does not expressly disclose that said back end monitor is further operative to maintain a cache directory comprising information that the cacheable content fragment is stored in said dynamic proxy

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cache. Matsumoto teaches a method (abstract) of proxy cache management (col. 1, line 1 – col. 5, line 16) in which an administering unit (back end) maintains a table (directory) to be administered (col. 7, lines 15-25) and that comprises said information (Figs. 7-11). At the time the invention was made, one of ordinary skill in the art would have added a Matsumoto cache directory to Craig in order to increase the efficiency of the cache system (col. 2, lines 45-50), particularly by determining the most efficient areas to store a bean and copies thereof (col. 2, line 65 – col. 3, line 5; col. 3, lines 20-25).

25. For claims 6, 17, 26, Craig teaches that said back end monitor is further operative to update the cache directory if the cacheable content fragment becomes invalid (Fig. 6, #600; serialVersionUID used to determine if an updated component is available).

26. For claims 7, 18, 20, 27, Craig teaches that said back end monitor is further operative to send a message to said dynamic proxy cache to remove the invalid cacheable content fragment (Fig. 6, #625).

27. For claim 8, Craig teaches multiple caches and storage areas (Fig. 4), but does not expressly disclose a plurality of dynamic proxy caches, wherein said back end monitor is further operative to determine whether the cacheable content fragment is stored in a specific one of said plurality of dynamic proxy caches. Matsumoto teaches the plurality of caches (Fig. 4), wherein a determination of cache location is made (col. 7, line 60 – col. 8, line 10). At the time the invention was made, one of ordinary skill in the art would have added Matsumoto fragment storage tracking to Craig in order to allow fewer stored fragments (col. 2, lines 65-67).

28. For claims 9, 39, Craig does not expressly disclose that said back end monitor is further operative to maintain a cache directory comprising information indicating whether the cacheable

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content fragment is stored in a specific one of said plurality of dynamic proxy caches.

Matsumoto teaches this limitation (col. 8, lines 35-50). At the time the invention was made, one of ordinary skill in the art would have added Matsumoto fragment storage tracking to Craig in order to allow fewer stored fragments (col. 2, lines 65-67).

29. For claim 35, Craig does not expressly disclose determining whether a content fragment's fragment ID corresponding to the cacheable content fragment exists in a cache directory maintained at a web site, the cache directory comprising information indicating whether the content fragment is stored in a dynamic proxy cache, assigning a key to the content element in response to a determination that the fragment ID does not exist in the cache directory, and inserting the key into the cache directory. Matsumoto teaches this process (col. 12, lines 5-35). At the time the invention was made, one of ordinary skill in the art would have added Matsumoto fragment storage tracking to Craig in order to allow fewer stored fragments (col. 2, lines 65-67).

30. Claim 43 is drawn to the limitations in claim 11. Therefore, since claim 11 is rejected, claim 43 is also rejected for the reasons above.

31. Claims 10, 19, 21, 36-38, 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig, Gauthier and Matsumoto as applied to claims 9, 11, 35, 39 above, and further in view of Mattis et al. (6,128,627).

32. For claims 10, 19, 40, Craig and Matsumoto do not expressly disclose that the information comprises a bit vector associated with the cacheable content fragment. Mattis teaches a method (abstract) of managing proxy caches (col. 1, line 1 – col. 6, line 60) using associations with bit vectors (col. 8, line 50 – col. 14, line 5; esp. col. 10, lines 13-23 and col. 11,

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lines 40-50). At the time the invention was made, one of ordinary skill in the art would have used bit vectors in Craig and Matsumoto in order to develop space-efficient keys (col. 10, lines 21-22).

33. For claim 21, Craig and Matsumoto do not expressly disclose that said updating step comprises clearing the bit of the bit vector. Mattis teaches this limitation (col. 31, line 15 – col. 32, line 18). At the time the invention was made, one of ordinary skill in the art would have used bit vectors in Craig and Matsumoto in order to develop space-efficient keys (col. 10, lines 21-22).

34. For claim 36, Craig and Matsumoto do not expressly disclose that, in said assigning step, the key is assigned by taking the next available key from a list of keys. Mattis teaches this limitation (Fig. 3A). At the time the invention was made, one of ordinary skill in the art would have used bit vectors in Craig and Matsumoto in order to develop space-efficient keys (col. 10, lines 21-22).

35. For claim 37, Craig and Matsumoto do not expressly disclose that updating the cache directory when the content fragment becomes invalid by releasing the key assigned to the content fragment and inserting the key back into the list of keys. Mattis teaches this limitation (col. 23, line 55 – col. 24, line 20). At the time the invention was made, one of ordinary skill in the art would have used bit vectors in Craig and Matsumoto in order to develop space-efficient keys (col. 10, lines 21-22).

36. For claim 38, Craig and Matsumoto do not expressly disclose that the key comprises an integer, and wherein the list of keys comprises a free list of unused integers. Mattis teaches this limitation (col. 10, lines 25-35). At the time the invention was made, one of ordinary skill in the

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art would have used bit vectors in Craig and Matsumoto in order to develop space-efficient keys (col. 10, lines 21-22).

37. Claim 41 is drawn to the limitations in claim 7. Therefore, since claim 7 is rejected, claim 41 is also rejected for the reasons above.

38. Claim 42 is drawn to the limitations in claim 21. Therefore, since claim 21 is rejected, claim 42 is also rejected for the reasons above.

Conclusion

39. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They regard further teachings on proxy caches and web page customization.

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin H. Pollack whose telephone number is (571) 272-3887. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MHP
18 August 2006


JASON CARDONE
SUPERVISORY PATENT EXAMINER